

7.26 continued

(30) U Boilers - Applicability.

Except as provided in 310 CMR 7.26(30)(a) and (b), the provisions of 310 CMR 7.26(30) through (37) apply to any person who owns or operates a boiler constructed on or after September 14, 2001, with a heat input rating equal to or greater than 10 million Btu per hour but less than 40 million Btu per hour. Complying with the criteria in 310 CMR 7.26(30) through (37) does not relieve the owner or operator from his or her applicability to the requirements of 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial - Commercial Steam Generating Units.

- (a) The provisions of 310 CMR 7.26(30) through (37) do not apply to an owner or operator of a facility required to obtain an operating permit pursuant to 310 CMR 7.00 Appendix C. Any person who installed a boiler in accordance with 310 CMR 7.26(30) shall continue to comply with 310 CMR 7.26(31) and (33) through (37) even if the facility later becomes subject to 310 CMR 7.00 Appendix C.
- (b) An owner or operator of a facility who proposes to construct a wood fuel-fired boiler with a heat input rating equal to or greater than 10 million Btu per hour but less than 40 million Btu per hour is not subject to the provisions of 310 CMR 7.26(30) through (37) for the wood fuel-fired boiler; however, 310 CMR 7.02(5) does apply.

(31) Definitions.

Terms used in 310 CMR 7.26(30)-(37) are defined in 310 CMR 7.00 or in 310 CMR 7.26(31). Where a term is defined in both 310 CMR 7.00 and in 310 CMR 7.26(31), the definition in 310 CMR 7.26(31) is applicable.

ADJACENT STRUCTURE means a structure that is within 5L of the stack. 5L means five times the lesser dimension (height or maximum projected width) of the structure.

AUTOMATED COMBUSTION CONTROL SYSTEM means a system that self adjusts burner/boiler operation to maximize energy efficiency. It must include at least the following capabilities: fuel/air ratio adjusted automatically, fuel flow metered/monitored, and continuous monitoring of nitrogen oxides (NOx) and carbon monoxide.

BOILER means a device that combusts any fuel and produces steam or heats water.

DISTILLATE FUEL OIL means fuel oil that complies with the specifications for fuel oil numbers 1 or 2 as defined by the American Society for Testing and Materials in ASTM D396-98, "Standard Specification for Fuel Oil" dated September 1998.

RED DYE DISTILLATE FUEL OIL means a distillate fuel oil that meets the requirements of 42 U.S.C. 7401 §211(i) as implemented and allowed for non-transportation purposes by
40 CFR 80.29.

(32) Certification.

(a) An owner or operator of a boiler subject to 310 CMR 7.26(30) shall certify, in compliance with 310 CMR 70.00 that the boiler is in compliance with 310 CMR 7.26(30) through (37).

(b) An owner or operator of a boiler subject to 310 CMR 7.26(30) shall submit to the Department an initial compliance certification form within 60 days of the date on which the boiler commences operation, and, thereafter, an annual certification form by March 15th of each year.

(33) Fuel of Use/Emission Limitations.

(a) Fuel of Use -

1. Only natural gas and red dye distillate fuel oil may be used, as specified in 310 CMR 7.26(33)(a)2 and 3.

2. NATURAL GAS -

a. All boilers subject to 310 CMR 7.26(30) shall burn natural gas as the primary fuel of use where the boiler is located on a property adjacent to a street or sidewalk underlain by a natural gas pipeline having sufficient pressure and capacity to supply natural gas to the boiler.

b. Red dye distillate fuel oil may be burned for a maximum of 90 days per calendar year.

3. RED DYE DISTILLATE - All boilers subject to 310 CMR 7.26(30) may burn red dye distillate fuel oil as the primary fuel of use when conditions for natural gas use, as specified in 310 CMR 7.26(33)(a)2, cannot reasonably be met, as determined by the Department in accordance with these regulations.

(b) Emission Limitations. Each boiler shall comply with

the following emission limitations in pounds per million BTU heat input for the fuel of use.

POLLUTANT	Fuel of Use	Emission limitation (lbs per million Btu)
Nitrogen Oxides	Natural Gas	0.0350
	Red Dye Distillate Fuel Oil	0.150
Particulate Matter	Natural Gas	0.010
	Red Dye Distillate Fuel Oil	0.020
Carbon Monoxide	Natural Gas	0.080
	Red Dye Distillate Fuel Oil	0.080
Volatile Organic Compounds	Natural Gas	0.030
	Red Dye Distillate Fuel Oil	0.030

(c) Sulfur dioxide emissions are limited by the sulfur content of the fuel. The sulfur content of the fuel is limited to:

1. Natural Gas 0.0006 lbs/million Btu
2. Red Dye Distillate Fuel 0.05% by weight

(d) The carbon monoxide emission limitation specified in 310 CMR 7.26(33)(b) does not apply to high turndown boilers while operating at less than 25 percent of the maximum input rating.

(e) Visible Emissions (excluding water vapor) may not exceed 10% opacity at any time during boiler operation.

(34) Operational Requirements.

(a) The boiler and appurtenances shall be operated in accordance with the manufacturer's standard operating and maintenance procedures.

(b) A boiler tune-up shall be performed annually for boilers that primarily burn natural gas, and twice a year for boilers that burn red dye distillate fuel oil as the primary fuel. A tune-up is not required if the boiler is equipped with a continuous automated combustion management and control technology system.

A boiler tune-up shall include an inspection for proper operation, any other maintenance recommended by the manufacturer, and an efficiency test. An efficiency test shall include at least a smoke spot reading, flue gas temperature measurement and a measure of carbon dioxide, oxygen, and carbon monoxide. A written record of the efficiency test and any maintenance performed shall be kept on site in accordance with the record keeping provisions contained 310 CMR 7.26(36).

(c) Fuel additives shall only be used in accordance with the manufacturer's instructions.

(35) Stack Requirements.

(a) Minimum stack height shall be 1.5 times the height of the building on which the stack is located. If the stack height is (1) lower than 1.5 times the building height or (2) lower than the height of an adjacent structure, an EPA Guideline air quality model shall be run to document that the operation of the applicable boiler(s) will not cause National Ambient Air Quality Standards exceedances. The air quality model documentation must be retained on site for as long as the boiler is operational.

(b) Stacks shall not be equipped with rain protection of a type that restricts the vertical exhaust flow of the combustion gases as they are emitted to the ambient air. "Shanty caps", "egg beaters" and the like are prohibited.

(c) The stack shall be configured to discharge the combustion gases vertically upwards.

(36) Recordkeeping

(a) A recordkeeping system shall be established and implemented onsite and shall provide sufficient detail to document compliance.

(b) Recordkeeping shall include the following:

1. dates of boiler installation and first operation;
2. a monthly record of fuel type, fuel additives, fuel usage in gallons or cubic feet, and sulfur content, as certified by the fuel supplier;
3. a written record of all tune-ups, including inspections, maintenance, and results of the efficiency tests, and;
4. all purchase orders and invoices related to boiler combustion or emission rate.

(c) Documentation shall be maintained onsite that the boiler and its appurtenances, as designed and installed, will comply with the emission limitations when operated in accordance with the manufacturer's instructions. This

documentation, including the manufacturer's operating instructions, shall be retained for as long as the boiler operates.

(d) All records shall be maintained up-to-date such that year-to-date information is readily available for Department examination. Records shall be kept for at least three calendar years.

(37) Prohibitions

(a) Concealing of emissions is prohibited.

(b) Removal of air pollution control or monitoring equipment is prohibited.

(c) Natural draft rotary cup burners are prohibited.